



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,893	02/01/2005	Umberto Marazzi	Q85964	6717
23373	7590	07/21/2008	EXAMINER	
SUGHRUE MION, PLLC			TYLER, STEPHANIE E	
2100 PENNSYLVANIA AVENUE, N.W.				
SUITE 800			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20037			3754	
			MAIL DATE	DELIVERY MODE
			07/21/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/522,893	MARAZZI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	STEPHANIE E. TYLER	3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 03 March 2008.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 13-28 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 13-28 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 13-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (3,213,878) in view of Zoll (3,800,825).

The Johnson reference discloses a fluid dispensing circuit having a pump (P) with a variable-volume chamber (33,35,19) and a head (13); wherein the head consists of a main body (21) in which an inlet duct (61,57) and an output duct (63,59) communicate with the variable-volume chamber (33,35,19); and wherein a second valve (69) is inserted in the inlet duct (61,57) and a third valve (71) is inserted in the outlet duct (63,59); and a delivery duct connect (L2,67) to the output duct (63,59) and a nozzle (end of L2 just before the carburetor); and wherein second valve (69) progressively opens during expansion of the variable-volume chamber (33,35,19) when fluid is drawn from a reservoir (T) and the third valve (71) is closed (col.4, lines 29-40); and wherein the desired amount of fluid has been drawn into the variable-volume chamber (33,35,19), the variable-volume chamber begins contracting, the second valve (closes and the third valve opens (col.4, lines 29-40); and wherein when the third valve (71) opens, fluid passes toward the delivery duct (L2,67), opens the first one-way valve (100 or 10, Zoll) and continues to the nozzle (end of L2 just before the carburetor); and

wherein the main body (21) delimits the variable-volume chamber (33,35,19) at least partially; and wherein the outlet duct (63,59) is formed partially inside the main body (21); and wherein the delivery duct (L2,67) extends partially outside the main body (21); and wherein the second valve (69) is partially open in the rest position; and wherein the second and third valves includes a closure member (101 for both), the closure members includes a flat abutment surface (flat surface of 101 for both valves); and wherein the second and third valves contains a filter (109).

However the Johnson reference lacks a first valve located along the delivery duct and outside the pump; and a knife-edge element.

The Zoll reference teaches a one way valve (10) with a stem (16) which is located along a delivery duct (50) and inherently outside of a pump (not shown) for the purpose of "permitting fluid flow through the valve" (col.5, lines 5&6). Also the Zoll reference discloses the one-way valve having an abutment (body of 10) inside the body of the valve consisting of a knife-edge element (28), a closure member (32); and the closure member consists of a flat abutment surface (surface of 30), and a resilient means/seal (30), and a filter (18,40,42; col.5, lines 15-19) inside of the valve (10)

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have reasonably modified the Johnson's device by including the one way valve taught by Zoll in order to provide a conventional and cost effective way to allow fluid flow to be dispensed through the valve. Also to modify the second and third valves of the Johnson's device to include a knife-edge element and a resilient

means/seal as further taught by Zoll in order to provide a well known way of creating tight seal against the sealing gasket.

Regarding claim 26, the fluid dispensing circuit having a pump consisting of a bellows pump is a design choice based upon the needs of the consumer that will be operating the fluid dispensing circuit. Having a bellows pump instead of a diaphragm pump does not affect the utility of the dispensing apparatus. The bellows pump and the diaphragm pump both have variable-volume chambers. Therefore that a bellow pump fails to be patentably define over prior art.

Re claim 14, wherein the third valve (71) is formed so as to withstand pressures lower than those of which cause the first one-way valve (10, Zoll) to open.

Re Claim 20, wherein a filter (F) is mounted externally upstream of the at least one of the one-way valve (10, Zoll) and third valve (71).

Re Claim 24, wherein the second valve (69) has a travel which is different from the travel of the at least one of the one-way valve (10, Zoll) and third valve (71).

Re Claim 27, a machine (E) for dispensing fluids, consisting of at least one reservoir (T) of fluids to be dispensed (through the carburetor), wherein it consists of at least one dispensing circuit (fig.1) according to claim 13, and wherein the pump (P) is connected to the at least one reservoir (T).

Re Claim 28, wherein the dispensing machine consists of a control system (C and E) for controlling the pump so as to deliver a predetermined quantity of fluid.

***Response to Arguments***

3. Applicant's arguments filed 3/3/2008 have been fully considered but they are not persuasive. Applicant's attention is drawn to the rejection above.
4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Zink (5,228,473), Krumm (4,433,966), Fowler (2,553,247), Ludin (2,255,852), Gulick (3,322,281), Henderson (3,825,027), Walsworth (4,632,144), O'Leary (2,426,639), Greco t al. (4,536,139) are other various types of variable volume pumps with multiple valves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHANIE E. TYLER whose telephone number is (571)272-8059. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. E. T./  
Examiner, Art Unit 3754

/Kevin P. Shaver/  
Supervisory Patent Examiner, Art Unit 3754